

**CLAIMS**

- 1        1. A method of translating a data stream into a context-insensitive tagged XML  
2 message, including:
- 3        receiving a data stream of structured messages, including context-setting  
4 messages and context-sensitive messages, said context-sensitive messages being  
5 meaningful only when matched with corresponding context-setting messages,  
6 said messages having one or more fields adapted to match the context-setting  
7 messages with the corresponding context-sensitive messages;
- 8        tagging the structured messages with XML tags corresponding to the structure of  
9 the messages;
- 10       matching the XML tagged context-setting messages with the corresponding XML  
11 tagged context-sensitive messages, utilizing the fields; and
- 12       generating context-insensitive XML retagged messages, the context-insensitive  
13 XML retagged messages having XML tags corresponding to the context of the  
14 context-sensitive messages; and
- 15       outputting the context-insensitive XML retagged messages.
- 1       2. The method of claim 1, wherein:
- 2       the context-setting messages include variable identifiers for variables to be  
3 reported;
- 4       the context-sensitive messages report values for the variables, said report  
5 messages including variable values but not the variable identifiers;
- 6       generating XML retagged messages includes generating XML tags corresponding  
7 to the variable identifiers and values corresponding to the variable identifiers.
- 1       3. The method of claim 2, further including accessing a dictionary that includes  
2 variable names corresponding to the variables identifiers, and generating XML tags  
3 corresponding to the variable names.

1 4. The method of claim 1, wherein:

2 the context-setting messages include report definition messages and report trigger  
3 messages, said report definition messages including a report identifier and one or  
4 more variable identifiers and said report trigger messages including an event  
5 identifier and one or more report identifiers;

6 the context-sensitive messages include report messages generated upon  
7 occurrence of an event associated with the event identifier, said report messages  
8 including the report identifier and variable values but not the variable identifiers;  
9 and

10 generating XML retagged messages includes generating XML tags corresponding  
11 to the variable identifiers and reporting the variable values.

1 5. The method of claim 4, further including accessing a dictionary that includes  
2 variable names corresponding to the variables identifiers, and generating XML tags  
3 corresponding to the variable names.

1 6. The method of claim 1, wherein:

2 the context-setting messages include report definition messages, said report  
3 definition messages including a report identifier and one or more variable  
4 identifiers;

5 the context-sensitive messages include one or more report messages generated in  
6 response to a report demand message, said report messages including the report  
7 identifier and variable values but not the variable identifiers; and

8 generating XML retagged messages corresponding to the variable identifiers and  
9 the variable values.

1 7. The method of claim 6, further including accessing a dictionary that includes  
2 variable names corresponding to the variables identifiers, and generating XML tags  
3 corresponding to the variable names.

1 8. The method of claim 1, wherein the structured messages are compliant with a  
2 SECS standard.

1        9. The method of claim 8, wherein:  
2        the context-setting messages include variable identifiers for variables to be  
3        reported;  
4        the context-sensitive messages report values for the variables, said report  
5        messages including variable values but not the variable identifiers;  
6        generating XML retagged messages includes generating XML tags corresponding  
7        to the variable identifiers and the variable values.

1        10. The method of claim 9, further including accessing a dictionary that includes  
2        variable names corresponding to the variables identifiers, and generating XML tags  
3        corresponding to the variable names.

1        11. The method of claim 8, wherein:  
2        the context-setting messages include report definition messages and report trigger  
3        messages, said report definition messages including a report identifier and one or  
4        more variable identifiers and said report trigger messages including an event  
5        identifier and one or more report identifiers;  
6        the context-sensitive messages include report messages generated upon  
7        occurrence of an event associated with the event identifier, said report messages  
8        including the report identifier and variable values but not the variable identifiers;  
9        and  
10        generating XML retagged messages includes generating XML tags corresponding  
11        to the variable identifiers and reporting the variable values.

1        12. The method of claim 11, further including accessing a dictionary that includes  
2        variable names corresponding to the variables identifiers, and generating XML tags  
3        corresponding to the variable names.

1        13. The method of claim 8, wherein:  
 2        the context-setting messages include report definition messages, said report  
 3        definition messages including a report identifier and identifiers of variables to be  
 4        reported;  
 5        the context-sensitive messages include one or more report messages generated in  
 6        response to a report demand message, said report messages including the report  
 7        identifier and variable values but not the variable identifiers; and  
 8        generating XML retagged messages corresponding to the identifiers of the  
 9        variables and values corresponding to the values for the variables reported.

1        14. The method of claim 13, further including accessing a dictionary that includes  
 2        variable names corresponding to the variables identifiers, and generating XML tags  
 3        corresponding to the variable names.

1        15. An improved method of generating XML tagged messages from multiple  
 2        types of structured, non-XML messages, received by a computer system operating  
 3        one or more translation programs and subjecting the messages received to format  
 4        checking and data validity checking, the improved method including:  
 5        tagging the structured, non-XML messages with XML tags corresponding to the  
 6        structure of the messages;  
 7        interpreting content and the structure of the structure tagged message to identify  
 8        fields of the structure tagged messages;  
 9        generating field tagged messages from the structure tagged messages, said field  
 10        tagged messages having XML tags corresponding to the identified fields of the  
 11        structure tagged messages; and  
 12        checking the field tagged messages for data format and data validity checking  
 13        utilizing tools adapted to XML formatted messages.

1        16. The method of claim 15, further including accessing a dictionary that includes  
 2        variable names corresponding to the variables identifiers, and generating XML tags  
 3        corresponding to the variable names.

1        17. A improved method of generating XML tagged messages from multiple types  
2 of structured, non-XML messages, received by a computer system operating one or  
3 more translation programs and subjecting the messages received to business logic  
4 processing, the improved method including:

5        tagging the structured, non-XML messages with XML tags corresponding to the  
6 structure of the messages;

7        interpreting content and the structure of the structure tagged message to identify  
8 fields of the structure tagged messages;

9        generating field tagged messages from the structure tagged messages, said field  
10 tagged messages having XML tags corresponding to the identified fields of the  
11 structure tagged messages; and

12        applying business logic processing to the field tagged messages utilizing tools  
13 adapted to processing XML formatted messages.

1        18. The method of claim 17, wherein tagging of structured, non-XML messages  
2 to form field tagged messages precedes applying business logic processing to data in  
3 the structured, non-XML message.